

## National Weather Service Storm Data and Unusual Weather Phenomena



Time Path Path Number of Estimated Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

#### KANSAS, Extreme Southeast

KSZ073-097 Bourbon - Crawford

A large scale ice storm event developed over southeast Kansas and west central Missouri during the early morning hours of January 30, 2002. Synoptically, a shallow arctic air mass moved through the region dropping surface temperatures in the upper 20s. Strong jet stream winds from the southwest provided the influx of sub-tropical type regime. In addition, deep moisture from the Gulf of Mexico surged northward above this shallow air mass to set the stage for a prolonged ice storm.

Light to moderate rainfall fell over the sub-freezing surface temperatures for nearly 36 hours. Ice begun accumulating on trees and power lines from southeast Kansas into west central Missouri Wednesday morning. Law enforcement officers and local weather observers reported nearly one half inch of ice accumulated on trees and power lines before 6 am Wednesday morning. The freezing rain, mixed with sleet at times, continued through the day with an additional one quarter to one half inch of ice by Wednesday evening. Total ice accumulations approached one inch thick on trees and power lines, by Wednesday night and Thursday. The ice started to weight down trees, power lines and other objects which caused widespread power outages.

During the height of the storm, nearly 150,000 people were without power from southeast Kansas into west central and central Missouri. In addition, trees snapped which caused damage to homes, cars and businesses. One of the most incredible acts of destruction wrought by the ice was the collapse of a 465-foot radio tower east of Pittsburg, Kansas. Storm shelters were set-up in Crawford and Bourbon counties of southeast Kansas due to the widespread power outages.

Although most of the main highway routes were wet, secondary roads were ice covered throughout the event. Numerous automobile accidents were reported, along with numerous injuries.

The storm system began to wind down Thursday morning as temperatures rose above freezing. However, additional ice related problems continued through the early afternoon as the melting ice fell on homes, cars and businesses.

### MISSOURI, Southwest

~g	ekie size han was also reported in Roshkoholig	ς.
Straight line wind	ckle size hail was also reported in Koshkonong	
23 2000CS	Thunderstorm Wind (G55)	
Trees were blown		
23 1955CS	Thunderstorm Wind (G52)	
23 1558CS 1604CS	Hail(0.75)	
		Hail(0.75)



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#### MISSOURI, Southwest

MOZ055>056-066>067

Benton - Morgan - Vernon - St. Clair

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Light to moderate rainfall, fell over the sub-freezing surface temperatures for nearly 36 hours. Ice begun accumulating on trees and power lines from southeast Kansas, and into west central Missouri Wednesday morning. Law enforcement officers and local weather observers reported nearly one half inch of ice accumulated on trees and power lines before 6 am Wednesday morning. The freezing rain, mixed with sleet at times, continued through the day with an additional one quarter to one half inch of ice by Wednesday evening. Total ice accumulations approached one inch thick on tree and power lines by Wednesday night and Thursday. The ice started to weight down trees, power lines and other objects which caused widespread power outages.

During the height of the storm, nearly 150,000 people were without power from southeast Kansas, into west central and central Missouri. In addition, trees snapped which caused damage to homes, businesses, and cars.

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MOZ058-070>071-082>083-096>098-105>106

Maries - Pulaski - Phelps - Texas - Dent - Douglas - Howell - Shannon - Ozark - Oregon

31 1300CST

0 0 0 Flood

A prolonged moderate rainfall event occurred over the Ozarks from the early morning to the evening hours of January 31, 2002. One day earlier, heavy rainfall provided nearly one inch of rain over the flooded areas, which made for already wet soil conditions prior to this event.

A shallow arctic front, which provided the focus for a large scale overrunning precipitation event, was nearly stationary along the Arkansas border during the day. The rainfall begun early Thursday morning with an almost continuous influx of steady rainfall from 9 am January 31, to approximately 6 pm that evening. Rainfall rates were generally low and ranged from one half, to three quarters of an inch per hour in the heaviest downpours. However, a general one to two tenths per hour was more consistent with the overall rainfall pattern, with isolated convective activity during the afternoon hours. 24 hour rainfall totals, including Doppler radar estimates in the flooded areas, ranged from one inch, to nearly three inches in Phelps, Pulaski, Texas, Howell and Shannon Counties.

Numerous low water crossings, streams and county roads were flooded throughout the event. Several of the county roads were closed and did not reopen until Friday morning, February 1, 2002. The hardest hit areas were in Pulaski and Shannon Counties where Cave, Spring, and Creek roadways along the Big Piney River, and Highway H between Highway 16 and 106, were closed for nearly 24 hours.